On the Opsthalmic fever.

You will find a description of it by Dr Willick as occurring in the French Army that besieged Gibraltar in the year 1799. I have seen a few cases of it, and have taken the liberty of calling it a "Dry Opthalmia" from its ~~attended~~ not being attended with an effusion of red blood, or an increased discharge of water from the eyes. It is accompanied with much more pain, than the Common Opthalmia.

The Opthalmic state of fever.

I include in this disease, morbid excitement in the eyes, whether it affect their coates, their membranes, their lids, or their whole substance. The worst cases of this disease ~~beh~~ are those in which no obvious change appears in the color of the eyes. There morbid excitement transcends inflammation. ~~The pain in these cases is most exquisite~~. Happily! ~~they~~ it rarely occurs, in consequence of the facility with which red blood passes into the ~~lo~~ serous vessels of the eyes. This disease in its ordinary ~~state~~ is ~~has causes of~~ generally attended with more or less activity in the pulse, and sometimes with a pain in the head, & occasionally with delirium.

II Causes which act indirectly upon the eyes. and

III Causes which act both directly and indirectly upon them.

V Salt dust, and small insects Dr Cleg=
=horn says sometimes induce it in
Minorca.

Its causes are I such as act directly upon the eyes
The causes which act directly are
I mechanically & chemically the

The mechanical irritants are
strokes or lesions of the eyes, sand - dust - the fine particles of
clam & oyster shells. The last is a frequent cause of this disease at Surinam,
where the streets are paved with those
calcareous exuvias. The pollen of plants.
It is often induced by this cause in
new settlements in the United States.
To this head of causes belong excess in
the use of the eyes in reading, writing,
sewing, and viewing small objects thro
a magnifying glass. Reading is most
hurtful when practised in the open
air, and in a clear sky - It is still more
so when practised in riding in a

carriage, or on horseback. The celebra-
=ted Mr Westley injured his eyes very
much in the latter way [In Doing so
he threw the reins of his bridle upon
the neck of his horse, ~~and what is very~~ He was unmanaged
~~to persuade~~ persuaded in the practice of riding on horseback,
by finding that his horse ~~whom~~ never
stumbled when he ~~as~~ thus left him to
guide himself.]

The irritants which act <u>Chemically</u>
upon the eyes are smoke, the juice of onions,
the fumes of spirits, - hence men who clean
them are generally afflicted with this
disease. The volatile matters emitted from
putrefying substances. This is so well
known ~~it so common~~ a cause of

Ophthalmia in Egypt, that it is common to say there — the "Stink blinds".

A 2nd Class of Causes act indirectly in bringing on this Disease. These are ~~the small pox, the Venereal Disease, and perspirable matter. The~~ Drunkenness, excess in venery ~~and~~ Certain Offensive matters in the stomach, and the dysentery.

There is a 3rd Class of Causes which act both directly and indirectly upon the eyes. These are 1 the small pox & 2 measles and Scrophula.

The Venereal Disease. It has been supposed the venereal Virus acts sympathetically or indirectly only upon the eyes, but there is reason to believe that the Virus is sometimes transposed by the absorbents to the eyes, and where this is not the

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the case, it is probable it is more often communicated to the eyes by means of the fingers, previously wetted ~~with~~ by touching the privates, or linen infected by them, and that without the patients being conscious of it. 3 Repelled perspiration. This is a frequent cause of opthalmia in Egypt. The night air & dews of that country induce it in this way. The Skin when constricted by the cool air may act sympathetically ~~upon~~ upon the eyes, but it is more probable, the repelled perspirable matter is thrown upon them. It is certainly thrown upon the ~~kid~~ bowels in ~~summer~~ summer, & upon the lungs in ~~summer~~ winter in ~~the climate~~ the United States.

V reflection of light from a white, & sandy ~~[illegible]~~ soil, also from snow. I have known two instances of its being induced by the vivid blaze of a hickory fire. —

4 The Ophthalmia from repelled perspiration has been happily called by Asellinia a "Coryza of the eyes". — 4 great heat. This acts both directly upon the eyes, and in=
=directly upon them thro' the medium of the whole body. It is indeed in Cooks & in men who work by large fires in this way. ~~Air when suddenly heated~~ The hot winds of Arabia brought it on ~~and~~ the celebrated traveller Mr Bruce. 5. The

6 Fevers with a great determination of blood to the head, also the fevers ~~which~~ according to Dr Thatcher which occur in moist & cold weather.

7 Rheumatic exhalations. These are a very frequent cause of Ophthalmia. Hence we read of its preceding accompanying, ~~preceding~~ and succeeding bilious fevers & the plague

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4 in all Countries. I have seen it alternate with ~~but only~~ the bilious fever, ~~but the~~ and ~~Dysentery~~ I have heard of a case ~~in which~~ verify the case of the late Dr Clarkson in which it alternated with Dysentery.

Its prevalence in Egypt more than in any other Country in the world, is to be ascribed chiefly to this cause, ~~and to~~ ~~repelled perspiration and~~ great heat, & ~~the~~ reflected light, only predispose to it in that Country - and even the night air ~~which repelled perspiration~~ perhaps acts ~~more~~ as often by exciting a local bilious fever ~~based~~ as by throwing perspi=rable ~~matter~~ upon the eyes. The ~~fetor~~ vapor of Onions upon ~~the~~ which the Egyptians feed so generally & the ~~fetor of fevers~~ fetor which issues from putrid substances in the

I infer this from a dirt of Drivers, great heat, offensive Odors, the reflect Air, and near the reflected light of the Sun from a white soil not produc=
=ing it as an epidemic in Countries not subject to bilious and pestilential fevers. They all produce solitary cases of it only, or at furthest, seldom in more than two or three persons in a family at a time.

streets of the cities in Egypt, no doubt both predispose to, ~~its~~, and create many solitary cases of the disease, but its general prevalence in that country as an Epidemic cannot be ascribed to mi=
=asmata only. The extent and degrees of the ravages committed in ~~that country~~ Egypt by this disease may easi=
=ly be conceived by the following facts.
Mr Volney tells us in his travels into Sy=
=ria that in a walk he once took thro
~~the~~ a street in Cairo ~~in which~~ he met one hundred persons, 20 were blind, 10 had but one eye, and in the remaining seventy, the eyes were inflamed, purul=
=ent, or affected by some blemish. Again of the British army that served in Egypt under Sir Ralph Abercrombie, 217 soldiers returned blind to their

native Country. Whenever this Disease prevails generally, or in a Country subject to bilious or intermitting fevers, I believe it is always the effect of the same cause which produces all the forms of arterial and intestinal bilious fever.

There is one more cause ~~which has~~ of Opthal=mia mentioned by some Authors, and that is Contagious. I mentioned formerly a supposed fact in favor of this opinion from Dr McGregor, and described it in some Soldiers who had recently arrived from Egypt to indeed the exercise of marching having ~~made~~ it by ~~a~~ throwing morbid excitement upon the eyes after they had been prepared to the Disease by the impure Atmosphere of Egypt. But Dr McGregor ~~does~~ not stand alone in defending the Contagiousness of

V They said the disease was general in the Vessel from which they were taken.

Ophthalmia. Professor Teirska of the Uni=
=versity of Krozowitz & Dr Armstrong, Ed=
=inburgh & Powers & Dewar have all
published facts intended to establish
it. I shall mention the most striking
of those facts from an inaugural dissertation of Doctor
Armstrongs entitled "de Sanitate tuenda". He tells
us that while serving on board the British
ship of war Albemarle in the year 1782. they picked up three sailors
from another vessel who had inflamed eyes.
In seven days, two and twenty of the
Albemarle's crew were affected with the
same disease, and that to such a degree
as to confine many of them to their ham=
=mocks. Upon separating the well, from
the sick, the disease disappeared. ~~I do~~
~~not believe notwithstanding, that it was~~
~~propagated by in this instance by contagion.~~
There are two ways in which this fact

V It is so more extraordinary that Opthalmia should be substituted for the ~~the eyes should be affected by miasmata~~, Ships fevers than ~~the~~ Dysentery & Catarrh should be so, both of which are common in crowded and foul Ships. ~~for~~ The Opinion I have delivered ~~was~~ is

may be explained without calling in the action of contagion. It is possible the ~~this~~ ~~so~~ disease in the three sailors originated in ~~[illegible]~~ poison or idiosyncrasy, ~~the general prevalence of the~~ and that it was a vicarious disease, or the substitute for a bilious or ship fever. ~~This~~ more rendered probable from the ophthalmia ~~its~~ being so general on board the ship ~~they~~ left by the ~~[illegible]~~ sailors and from its ~~appearing~~ general prevalence in ~~at~~ Egypt, & all other countries being derived only from one of the two sources of fever that have been ~~one of these~~ mentioned. Admitting this to be the case, it is easy to conceive the disease was propagated by the breathes of the three sailors to which we know from facts mentioned in our pathology, idiosyncrasy or human exhalations adhere with great pertinacity for weeks & months. If this

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explanation of the fact be not satisfactory, ~~but do~~ I will propose another. Many diseases and animal motions are produced by sympathy. The Epilepsy I shall say hereafter has spread thro a School, & part of a hospital from this cause. Squinting, & Stammering have spread in ~~the~~ the same way. Gaping, often passes as if by infection thro a large crowd full of company. An inclination to make water is felt in succession by a whole School, by one boy only ~~go~~ going out for that purpose. But the eyes above all other parts of the body discover the greatest predisposition to Sympathetic Motions. They ~~inspire~~ communicate joy, terror & distress ~~& sentiments~~ melancholy, ~~& so on~~ to a whole Assembly. ~~But~~ They even do more - they draw tears from every eye in that assembly. I know this last ~~and high~~ act of oratorical influence is ascribed to the power of words

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acting upon the eyes thro' the medium of the passions — but this is not true. ~~Tears are necessary~~ ~~Horace has long ago refuted it.~~ "Si vis me flere, dolendum est tibi primum" says the Roman poet. — Tears are absolutely necessary to produce tears. ~~in~~ Now let us suppose this kind of sympathy to be a little increased, and we shall have not only a preternatural secretion of tears, but an effusion of the blood in the tissues & vessels of the eyes, & accompanied with all the common symptoms of Ophthalmia. Take either of these theories gentlemen. Perhaps both of them in different circumstances may be true.

There has been a strange disposition in European physicians to ascribe the propagation of nearly all diseases to contagion. — It is a short & easy method of getting rid

v. I have thus described the ordinary form of Opthalmia, but there

of knotty questions, for it requires the ~~[illegible]~~ assent of the mind to but one, and that a single proposition, whereas the doctrine of diseases originating in domestic or personal causes, requires a patient investigation & a laborious combination of facts, and ideas, ~~and~~ which can rarely be submitted to ~~[illegible]~~ physicians only whose objects ~~in their profession~~ are is a short and easy ~~cut to~~ road to business & fame.

The indications of cure in this disease are

I To remove all its remote causes.

II To reduce morbid excitement in the eyes.

III To give tone to the vessels of the eyes.

1 The ~~indication under the first head~~ remote causes have been named. They should be removed with great care. If there is reason to believe it originates from miasmata, the patient should be removed from the part of the country in which they are generated.

II. To reduce the morbid excitement in the eyes the following remedies are proper

1 Darkness. This should be continued for days,

V of this copious mode of bleeding as proper only in Climates similar to Ours. It has been beneficial in Egypt. Local bleeding alone has been found useful in the Opthalmia of that Country. —

N 3 Gentle but frequent purging, and
4 low very low diet.

weeks and months if necessary. It should in some cases be so complete as to exclude even the light of an ordinary fire. I have once known a single ~~blazing~~ chunk of fire give pain to an inflamed eye in a room in which the windows & doors were completely closed.

2 Bleeding. This should be general from the arm, and local from the temples, ~~and~~ from the tarsi palpebrarum, and the eyes themselves, by means of Cups Leaches and Scarifications. In the use of this remedy recollect that the eyes are out of the great circulation, and that a greater quantity of blood ~~ought~~ must to drawn in order to relieve them than from the large viscera. The loss of ℥100 of blood at successive bleedings have been found necessary in some instances to cure this disease. I speak

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5 Incessant Ablutions of the eyes with milk, or milk and water. However simple this remedy may appear to be, I think I have seen it do ~~more~~ great service in the most acute & inflamy state

of Opthalmia. It acts by relaxing the vessels of the eyes, and by obtunding the acid secretion which takes place from the eyes whether of tears from the lacrymal glands, or of mucus from the eyelids. — The milk may be applied dressing the night ~~by means of~~ in the form of a poultice mixed with soft bread. No oil, nor grease of any kind should be mixed with it.

5th Cold water. This remedy frequently gives great relief, but never until after depletion. I have seen it do harm in the first stage of this disease. Recollect what was said of cold water as an external remedy formerly in diseases of great morbid excitement, and of the necessity of reducing it previously to the application of the water. The famous travelling Dentist Dr Graham in his rambles thro' this country about the year 1792 informed me that he found most benefit from the use of cold water to the eyes by placing his patients

[illegible]

feet in a bucket or tub of cold water. ~~before~~ ~~to applied the~~ ~~At~~ the time he applied the cold water to them, and that he applied it only by means of cloths previously wetted with the water. A chillinesp was thus induced in the whole system which favoured the sedative action of the water, and preventing ~~the~~ the sudden reaction of the vessels of the eyes. Blisters to the neck, behind the ears, to the temples, and over the eyes lids, taking care in the last case, to keep the lids well closed. After the reduction of morbid excitement, de inflammation in the eyes the remedies should be III such as are calculated to give tone of their blood vessels. They should stimulating applications of different kinds. I shall enumerate the most common and popular of them, beginning with the weakest. 1 Wine and water. 2 Brandy, or spirit of any kind, and water. 3 Salt and water. 4 Infusions of Oak galls or Peruvian Bark. 5

lead water. 6 an eye water thus made. ~~Take~~
Sulphate of Zinc ℥i ~~sub~~ acetate of lead ℈ ss
Water ℥iv. [This is a quack prescription, for it is
not chemical, but it has long been used with
great hoaxs in our city. It was introduced into
general use of Wm Allen Chief Justice of Pennsy.
a worthy and benevolent man who made
and gave away made gallons of it among
his friends & to the poor every year] —
℞ Opii ℥i galls ℥ij aqua ℥iv — a little of this infusion
must be dropped into the eye.
℞ Dr White one of the physicians of the British
Army in Egypt commends the following Eye
Water in high terms. Cosmos: sublimat: ℈ ij
Spirit and water of each ℥ij applied by means
of a soft rag to the eyes. ℞ Liq: Laud: ℥i wine &
water of each ℥ij. This was the favorite
eye water of Dr Stork who travelled thro this
Country as an Aurist about the year
1780. ℞ Alum ℥ss water ~~℥~~ ℥iv. M Dr

Guthrie mentions in a letter to Dr. Duncan
a ~~case for~~ case of Chronic Opthalmia in an Ar-
-tist in whom the disease was induced by
overstretching his eyes by means of a Mag-
-nifier, being cured by the Vapor of Turpentine
accidentally conveyed to his eyes by his wife.

~~℞ Dr Scarpa commends the following Colly-
-rium in high terms. Sulphate of Copper
and American Gole~~

℞ I have known an infusion of Camphor
ʒi and ~~Bol. Armenia~~ American Gole ℥ss
in ℥iv of water do great service in the declining
state of Opthalmia.

When an acid humor is poured upon
the eye from the eye lids, or when the tears
become acid, the following demulcent applic-
-ations have been found useful. 1. The ~~pith~~
pith of Sassafras mixed with water 2. Quince
Seeds bruised and mixed with water. 3 an
Ointment made of the finely levigated powder

of Calamine stone mixed with ~~fresh~~ ~~the~~ unsalted butter.

For sores, or swellings on the Tarsi palpebrarum, the Citron Ointment, & an Ointment composed of equal parts of tar and hogs lard have ~~been~~ been found useful.

When this disease resists all the remedies that have been mentioned, recourse should be had to a Salivation. This is indispensably necessary when there is any reason to believe it arises from a Venereal Cause.

When it arises from miasmata, or is a disguised form of Autumnal fever, the remedies should be the same as for that fever. Bark has often cured it ~~when gi~~ in these cases. It does ~~not~~ most good when given in the intervals of the disease when such intervals occur. ~~Opium has been useful in Ophthalmia. I suspect it is only when the disease It~~

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~~Where~~ we have reason to believe the Disease originates from foul matters, or a diseased Action in the Stomach, ~~Emetics~~ Emetics should be given. They often give instant relief. Dr Campbell commends Opium in Chronic Ophthalmia. When it cures, I suspect it acts ~~as a tonic~~ principally ~~upon the~~ upon the Stomach, and by imparting tone to it, gives tone to the Vessels of the eyes. — Bitters should follow the use of Emetics in Ophthalmia from foul matters, or a Disease in the Stomach.

An Ophthalmia is sometimes con=
=nected with ~~general debility~~ Scrophula. In this case Bark ~~and stimulant tonics~~ is a most power=
=ful remedy provided the pulse be at par or below it. If above par — the remedies should be bleeding, purges & low diet.

If the Opthalmia be accompanied with general debility, the remedies should be Bark preparations of Iron, ~~and a~~ cordial diet & exercise.

When it is the effect of a translation of another disease, that disease should be restored. For example – if it arise from Dysentery, purges should be given – if from the retrocession of customary dis=charges, or eruptions, they should be brought back by the remedies proper for that purpose. If from Gonorrhea, by bougies, or irritating injections, or applications to the perineum. I have lately heard of a Chronic Opthalmia being cured by an Attack of inflamt fever. Perhaps an artificial fever might be excited with the same

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salutary effect. It owes its peculiar ob=
=stinacy in many cases to its being
an insulated disease. By exciting an
artificial fever, we may divide its force,
and by diffusing it throughout the whole
sanguiferous system, it is ~~probable~~ probable we
may cure it. —

I need hardly add of how much
consequence it is to attend early, and
closely to an inflam^d disease in the
eyes. When neglected, or not treated
properly, it often ends in blindness from
a film, Amaurosis, & Cataract, and
sometimes in suppuration, or such
Ulcers in its Coats, as end in Cancer
and death. —

There is disease in the eyes which has been improperly called Ophthalmia W. Ch. comes on suddenly most commonly in the Night, and in some persons after riding in the Wind. The ~~whole~~ external eye is ~~inflamed with red~~ ~~blood. It~~ is ~~called~~ said to be blood shot — or bloodshed. It is attended with no pain, and is not increased by light, or reading. — I have called it an Ecbrysmosis of the eyes. It seldom requires V/S or purging, and yields in a few days to any gently stimulating eye water.